REPRESENTED BY
MANTEC
P.O. Box 54, Danielson, CT 06239
(203) 774-1551
(617) 828-2562

ELECTRONICS, INC.

1696 CHURCH STREET
HOLBROOK, NY 11741

RADIO INTERFERENCE FILTERS

THE MTK STORY

MTK's commitment to the "State of the art" design, development and manufacture of Radio Interference Filters, since 1981, is more pertinent today then ever. MTK's expansion into virtually every area where Radio Interference Filters are required show the steady growth in serving industry. On the following pages are represented the broadest line of Radio Interference Filters.

FACILITIES

MTK operates a modern, specifically designed 8,000 square foot plant in Holbrook, NY. This plant houses all MTK facilities enabling us to control the quality standards and production schedules. It assures our customers of one-company, responsibility for quality and delivery.

QUALITY CONTROL

The MTK Quality Control System has been reviewed and approved by our major customers and military agencies. *It is known for its high level of quality repeatability throughout the industry. MTK is equipped to provide strict traceability standards.*

APPLICATION ENGINEERING

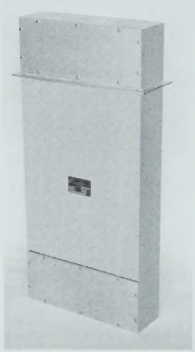
Our experienced Staff of Application Engineers is available to help with Special requirements and application problems. In addition, assistance in product selection and special requirement solutions is provided by our network of local sales representatives.

CUSTOM ENGINEERING

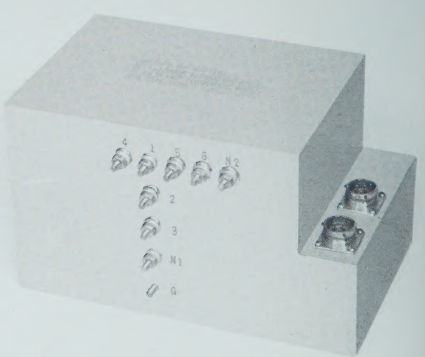
Personal attention is given by our engineering staff to customers special requirements. Our fully computerized-in-house design, order entry and inventory control systems, allows the expeditious development and production of customized Radio Interference Filters, with minimum lead time and cost.

QUALITY CUST

CUSTOM ENGINEERED
MILITARY MULTI-CIRCUIT
FILTER



MEDICAL EQUIPMENT
FILTER 700 AMP



CUSTOM ENGINEERED
MILITARY MULTI-CIRCUIT
FILTER

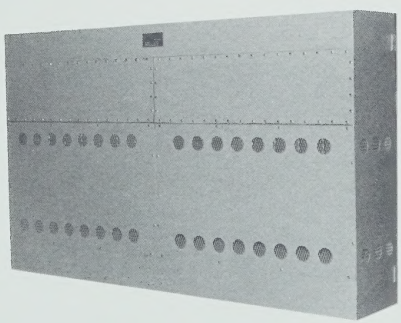
TABLE OF CONTENTS

PRODUCT	PAGE
POWER LINE FILTERS	2, 3
POWER LINE FILTERS FOR SHIELDED AREAS	4, 5
TELEPHONE AND SIGNAL FILTERS	6, 7
CYLINDRICAL "PI" FILTERS 80 db	8, 9
CYLINDRICAL "PI" FILTERS 60 db	10, 11
CYLINDRICAL "PI" FILTERS 40 db	12, 13
CYLINDRICAL "L" FILTERS	14, 15
CYLINDRICAL "PI" FILTERS, MILITARY STYLES	16, 17
SINGLE, DUAL AND TRIPLE CIRCUIT FILTERS	18, 19
RECTANGULAR AND TUBULAR FILTERS	20, 21
POWER FACTOR CORRECTION INDUCTORS ASSEMBLIES	BACK COVER

OM RF FILTERS

CUSTOM ENGINEERED
MILITARY MULTI-CIRCUIT
FILTER

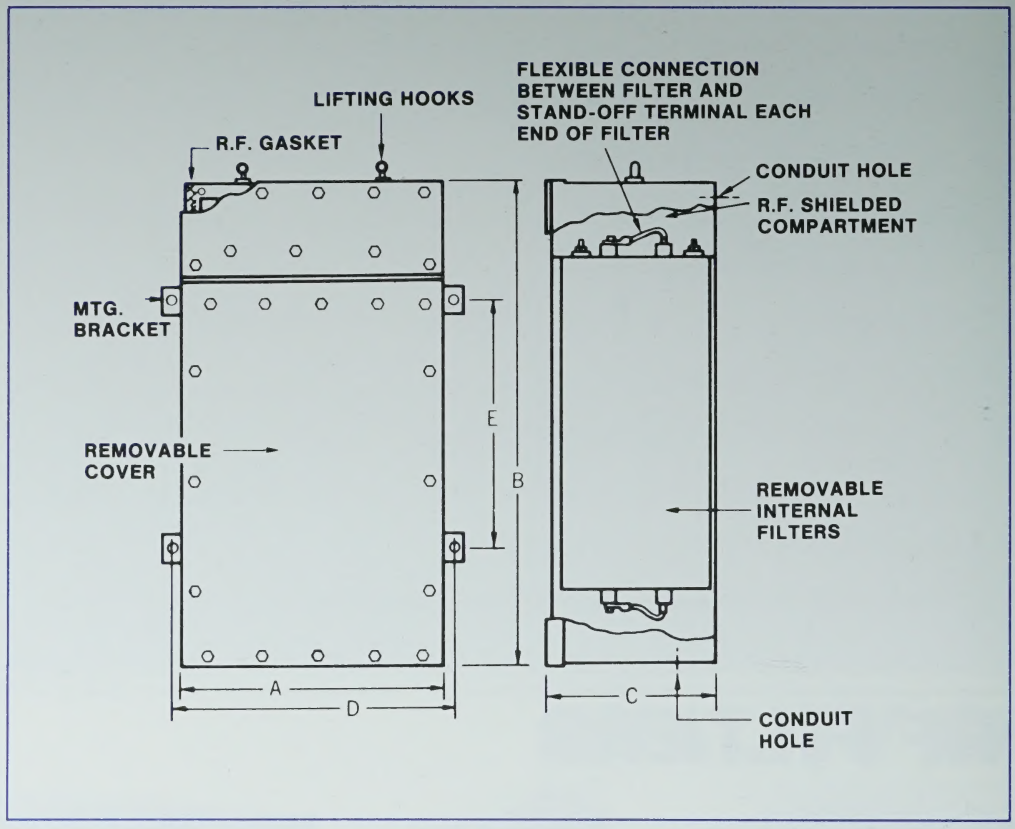
POWERLINE FILTER
FOR SHIELDED AREA



MAIN DISTRIBUTION
POWER FILTER
3 PHASE, 4 WIRE
800 AMP

POWER LINE FILTERS

POWER LINE FILTERS 5 to 200 Amp Circuits
600 VDC, 0-277 Vac Line to Neutral
0-480 Vac Line to Line, 0-60 Hz.
400 Hz. Filters Available, Contact Factory.



FEATURES

- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Each individual filter circuit is replacable in the field without the use of special tools.
- Each individual filter circuit is hermetically sealed.
- Terminals: Each circuit is terminated with a flexible lead to an electrical standoff preventing damage to the terminals.
- Maximum voltage drop: 2 Volts.
- Maximum operating temperature 85°C
- Overload Safety: 140% rated current for 15 mintues.
- Case; Steel all welded construction suitably plated on grounding surfaces and painted on all other surfaces.

ELECTRONICS, INC.
516-567-4666

MTK-F SERIES

INSERTION LOSS: 100db from 14KHz to 10GHz in accordance with MIL-STD-220A, load condition.
SPECIAL: ALSO MEASURED UNDER FULL LOAD CONDITION FROM 14KHz TO 20MHz WITH EXTENDED RANGE BUFFER NETWORKS.

Part No.*	Current Amperes	Dimensions, inches A	B	C	D	E	Conduit hole dia.	Approx. weight (lbs.)
MTK1F5G	5	12 1/4	29	5	14 1/4	17	7/8	45
MTK2F5	2 x 5	12 1/4	29	5	14 1/4	17	7/8	65
MTK2F5G	2 x 5	12 1/4	29	5	14 1/4	17	7/8	65
MTK3F5	3 x 5	20	29	5	22	17	7/8	95
MTK3F5G	3 x 5	20	29	5	22	17	7/8	95
MTK4F5	4 x 5	20	29	5	22	17	7/8	115
MTK1F10G	10	12 1/4	29	5	14 1/4	17	7/8	50
MTK2F10	2 x 10	12 1/4	29	5	14 1/4	17	7/8	75
MTK2F10G	2 x 10	12 1/4	29	5	14 1/4	17	7/8	75
MTK3F10	3 x 10	20	29	5	22	17	7/8	110
MTK3F10G	3 x 10	20	29	5	22	17	7/8	110
MTK4F10	4 x 10	20	29	5	22	17	7/8	135
MTK1F15G	15	12 1 /4	29	5	14 1/4	17	7/8	55
MTK2F15	2 x 15	12 1/4	29	5	14 1/4	17	7/8	85
MTK2F15G	2 x 15	12 1/4	29	5	14 1/4	17	7/8	85
MTK3F15	3 x 15	20	29	5	22	17	7/8	125
MTK3F15G	3 x 15	20	29	5	22	17	7/8	125
MTK4F15	4 x 15	20	29	5	22	17	7/8	155
MTK1F30G	30	12 1/4	37	5	14 1/4	25	1 3/8	95
MTK2F30	2 x 30	12 1/4	37	5	14 1/4	25	1 3/8	145
MTK2F30G	2 x 30	12 1/4	37	5	14 1/4	25	1 3/8	145
MTK3F30	3 x 30	20	37	5	22	25	1 3/8	225
MTK3F30G	3 x 30	20	37	5	22	25	1 3/8	225
MTK4F30	4 x 30	20	37	5	22	25	1 3/8	275
MTK1F50G	50	15 1/2	48	11	17 1/2	36	1 3/4	205
MTK2F50	2 x 50	15 1/2	48	11	17 1/2	36	1 3/4	305
MTK2F50G	2 x 50	15 1/2	48	11	17 1/2	36	1 3/4	305
MTK3F50	3 x 50	25	48	11	27	36	1 3/4	445
MTK3F50G	3 x 50	25	48	11	27	36	1 3/4	445
MTK4F50	4 x 50	25	48	11	27	36	1 3/4	545
MTK1F100G	100	16 1/2	60	11	18 1/2	48	2	265
MTK2F100	2 x 100	16 1/2	60	11	18 1/2	48	2	400
MTK2F100G	2 x 100	16 1/2	60	11	18 1/2	48	2	400
MTK3F100	3 x 100	25	60	11	27	48	2	580
MTK3F100G	3 x 100	25	60	11	27	48	2	580
MTK4F100	4 x 100	25	60	11	27	48	2	715
MTK1F150G	150	17 1/2	60	17	19 1/2	48	2 1/2	415
MTK2F150	2 x 150	17 1/2	60	17	19 1/2	48	2 1/2	665
MTK2F150G	2 x 150	17 1/2	60	17	19 1/2	48	2 1/2	665
MTK3F150	3 x 150	25	60	17	27	48	2 1/2	965
MTK3F150G	3 x 150	25	60	17	27	48	2 1/2	965
MTK4F150	4 x 150	25	60	17	27	48	2 1/2	1215
MTK1F200G	200	17 1/2	60	25	19 1/2	48	3	595
MTK2F200	2 x 200	17 1/2	60	25	19 1/2	48	3	970
MTK2F200G	2 x 200	17 1/2	60	25	19 1/2	48	3	970
MTK3F200	3 x 200	25	60	25	27	48	3	1395
MTK3F200G	3 x 200	25	60	25	27	48	3	1395
MTK4F200	4 x 200	25	60	25	27	48	3	1770

*"G" denotes that case includes grounded neutral conductor stud.

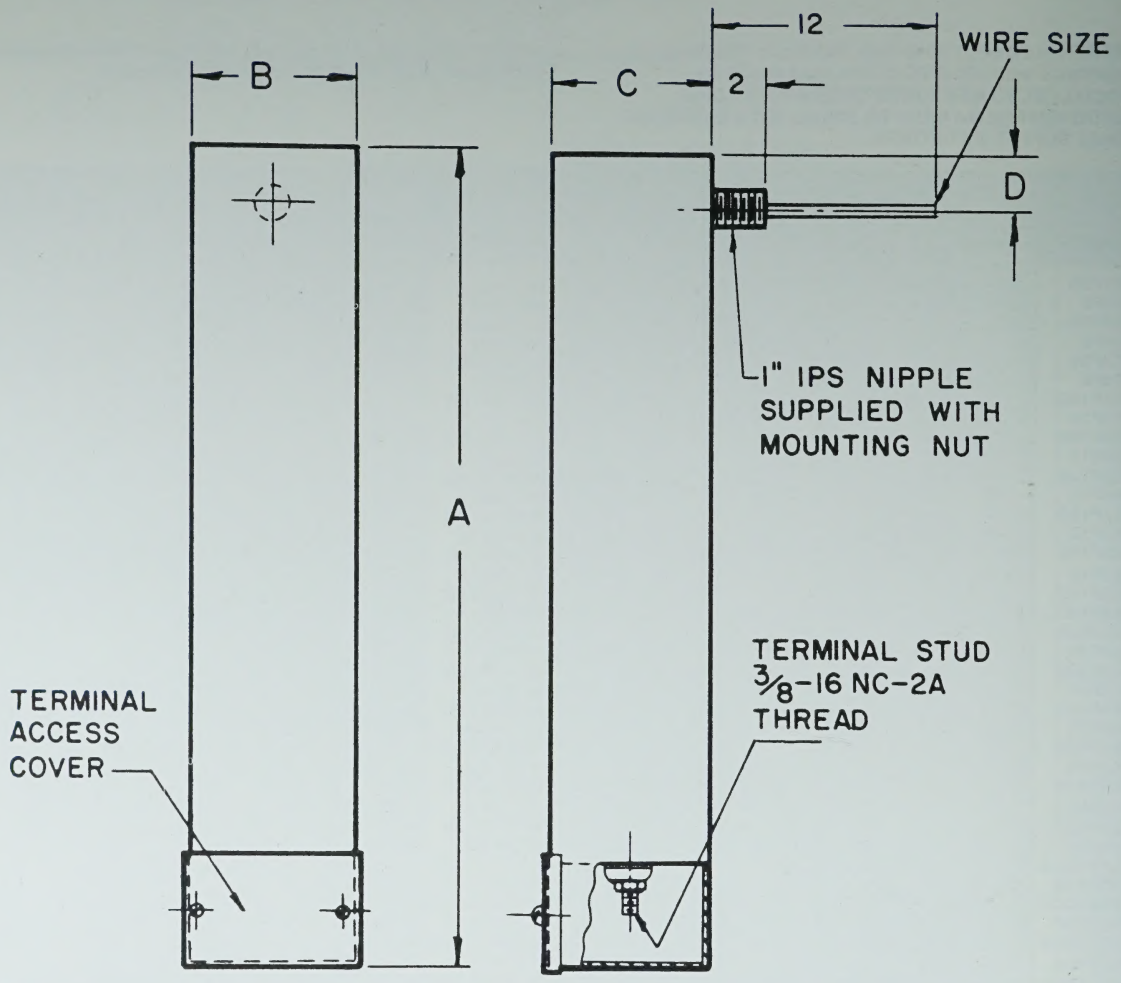
MTK-N SERIES

INSERTION LOSS: 100 db from 14KHz to 10GHz measured in accordance with MIL-STD-220A, load condition.

Part No.*	Current Amperes	Dimensions, inches A	B	C	D	E	Conduit hole dia.	Approx. weight (lbs.)
MTK1N5G	5	12 1/4	29	5	14 1/4	17	7/8	35
MTK2N5	2 x 5	12 1/4	29	5	14 1/4	17	7/8	45
MTK2N5G	2 x 5	12 1/4	29	5	14 1/4	17	7/8	45
MTK3N5	3 x 5	20	29	5	22	17	7/8	65
MTK3N5G	3 x 5	20	29	5	22	17	7/8	65
MTK4N5	4 x 5	20	29	5	22	17	7/8	75
MTK1N10G	10	12 1/4	29	5	14 1/4	17	7/8	40
MTK2N10	2 x 10	12 1/4	29	5	14 1/4	17	7/8	50
MTK2N10G	2 x 10	12 1/4	29	5	14 1/4	17	7/8	50
MTK3N10	3 x 10	20	29	5	22	17	7/8	70
MTK3N10G	3 x 10	20	29	5	22	17	7/8	70
MTK4N10	4 x 10	20	29	5	22	17	7/8	80
MTK1N15G	15	12 1/4	29	5	14 1/4	17	7/8	40
MTK2N15	2 x 15	12 1/4	29	5	14 1/4	17	7/8	55
MTK2N15G	2 x 15	12 1/4	29	5	14 1/4	17	7/8	55
MTK3N15	3 x 15	20	29	5	22	17	7/8	80
MTK3N15G	3 x 15	20	29	5	22	17	7/8	80
MTK4N15	4 x 15	20	29	5	22	17	7/8	95
MTK1N30G	30	12 1/4	37	5	14 1/4	25	1 3/8	75
MTK2N30	2 x 30	12 1/4	37	5	14 1/4	25	1 3/8	105
MTK2N30G	2 x 30	12 1/4	37	5	14 1/4	25	1 3/8	105
MTK3N30	3 x 30	20	37	5	22	25	1 3/8	145
MTK3N30G	3 x 30	20	37	5	22	25	1 3/8	145
MTK4N30	4 x 30	20	37	5	22	25	1 3/8	175
MTK1N50G	50	12 1/4	37	5	14 1/4	25	1 3/4	75
MTK2N50	2 x 50	12 1/4	37	5	14 1/4	25	1 3/4	105
MTK2N50G	2 x 50	12 1/4	37	5	14 1/4	25	1 3/4	105
MTK3N50	3 x 50	20	37	5	22	25	1 3/4	145
MTK3N50G	3 x 50	20	37	5	22	25	1 3/4	145
MTK4N50	4 x 50	20	37	5	22	25	1 3/4	175
MTK1N100G	100	16 1/2	37	11	18 1/2	25	2	120
MTK2N100	2 x 100	16 1/2	37	11	18 1/2	25	2	170
MTK2N100G	2 x 100	16 1/2	37	11	18 1/2	25	2	170
MTK3N100	3 x 100	25	37	11	27	25	2	240
MTK3N100G	3 x 100	25	37	11	27	25	2	240
MTK4N100	4 x 100	25	37	11	27	25	2	290
MTK1N150G	150	17 1/2	40	17	19 1/2	25	2 1/2	210
MTK2N150	2 x 150	17 1/2	40	17	19 1/2	28	2 1/2	310
MTK2N150G	2 x 150	17 1/2	40	17	19 1/2	28	2 1/2	310
MTK3N150	3 x 150	25	40	17	27	28	2 1/2	445
MTK3N150G	3 x 150	25	40	17	27	28	2 1/2	445
MTK4N150	4 x 150	25	40	17	27	28	2 1/2	545
MTK1N200G	200	17 1/2	40	17	19 1/2	28	3	210
MTK2N200	2 x 200	17 1/2	40	17	19 1/2	28	3	310
MTK2N200G	2 x 200	17 1/2	40	17	19 1/2	28	3	310
MTK3N200	3 x 200	25	40	17	27	28	3	445
MTK3N200G	3 x 200	25	40	17	27	28	3	445
MTK4N200	4 x 200	25	40	17	27	28	3	545

*"G" denotes that case includes grounded neutral conductor stud.

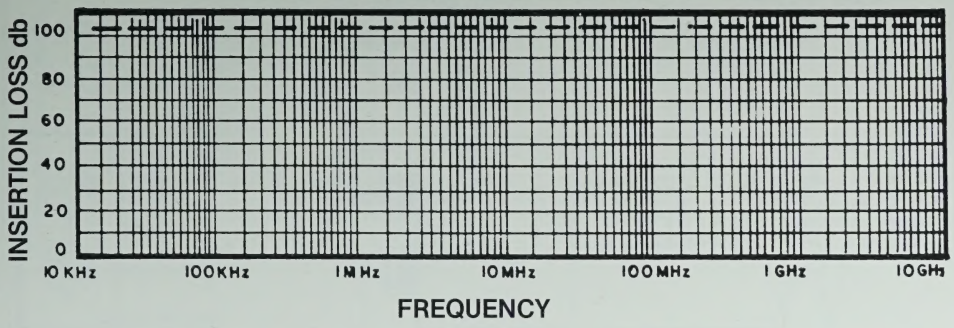
POWER LINE FILTERS FOR SHIELDED AREAS



FEATURES

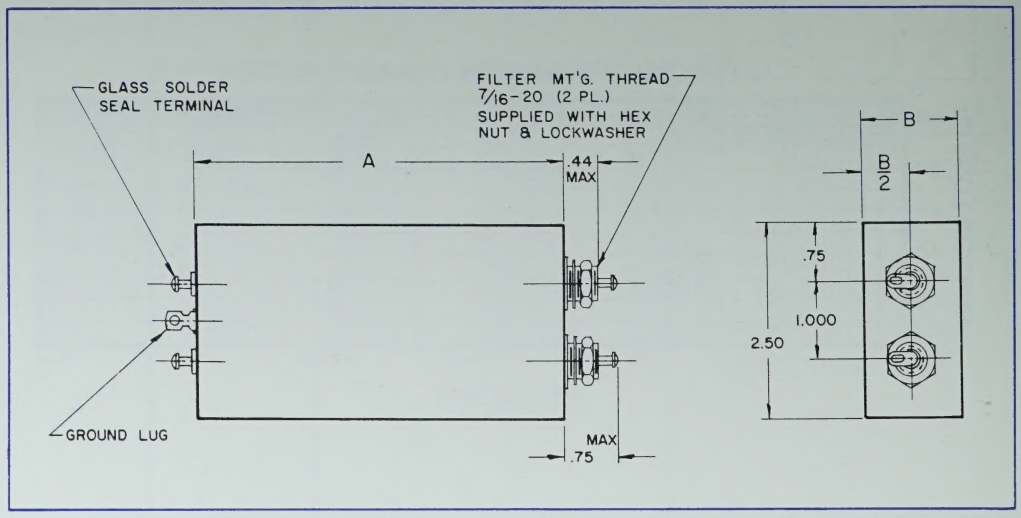
- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Penetration is terminated with a flexible lead.
- Maximum voltage drop: 2 Volts.
- Maximum operating temperature 85°C
- Overload Safety: 140% rated current for 15 mintues.
- Case; Steel suitably plated to withstand corrosion.

TYPICAL ATTENUATION CHARACTERISTICS



PART NO.	RATING	DIMENSIONS				WIRE SIZE
		A	B	C	D	
M1141	10 AMP 277 VAC 60Hz 600 VDC	18	4	4	1 1/2	No. 10
M1131	30 AMP 277 VAC 60Hz 600 VDC	18	4	4	1 1/2	No. 10
M1070	50 AMP 277 VAC 60Hz 600 VDC	24	4	4	1 1/2	No. 6
M1072	100 AMP 277 VAC 60Hz 600 VDC	29	4 1/2	4 1/2	2	No. 2
M1139	200AMP 277 VAC 60Hz 600 VDC	29	10	4 1/2	1 1/2	No. 2/0

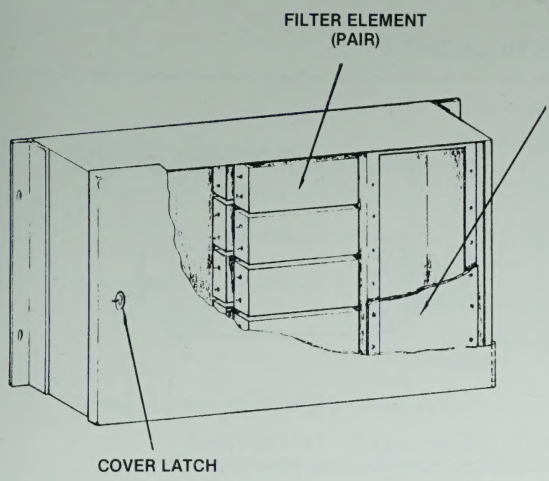
TELEPHONE AND SIGNAL FILTERS



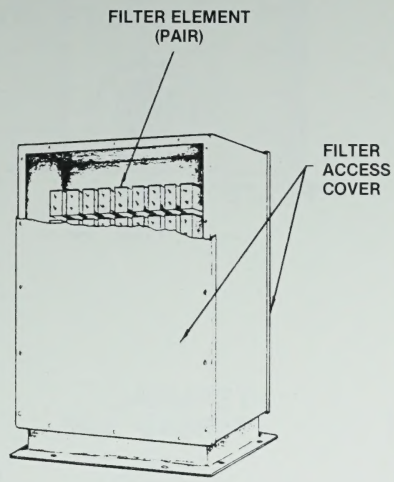
PART NO.	RATING	INSERTION LOSS		DIMENSIONS	
		PASS BAND	STOP BAND	A	B
M 1129	2 x 160 MA 600 VDC	.25 db MAX. @ 1000 Hz .60 db MAX. @ 3000 Hz 1.5 db MAX. @ 5000 Hz	56 db @ 10 KHz 80 db @ 14 KHz 100 db @ 20 KHz 100 db FROM 25 KHz — 1000 MHz	4.75	1.25
MTK1214X2	2 x 0.5 AMP 300 VDC	1.5 db @ 5 KHz	100 db @ 14 KHz	7.00	1.25
M 1392	2 x 0.5 AMP 115 VAC 400 VDC	1.5 db @ 3 KHz	100 db FROM 14 KHz — 10 GHz	5.50	1.38
M 1138-1	2 x .15 AMP 250 VAC 60 Hz 600 VDC	.4 db MAX. @ 4 KHz 10.0 db MAX. @ 10 KHz	100 db MIN. FROM 50 KHz — 1000 MHz	4.00	1.25
M 1138-2	2 x .15 AMP 250 VAC 60 Hz 600 VDC	1.0 db MAX. @ 23 KHz	100 db MIN. FROM 100 KHz — 1000 MHz	4.00	1.25

FEATURES

- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Pass band insertion loss measured in a 300 ohm system per MIL-STD-220A.
- Stop band insertion loss measured in a 50 ohm system per MIL-STD-220A.
- Case: Steel suitably plated to withstand corrosion.
- Filters can be supplied installed in cabinets as shown on facing page.



TYPICAL WALL MOUNTED CABINET
TO ACCOMMODATE 10, 25, 50,
OR 100 FILTER PAIRS



TYPICAL FREE STANDING CABINET
TO ACCOMMODATE UP TO 600 PAIRS

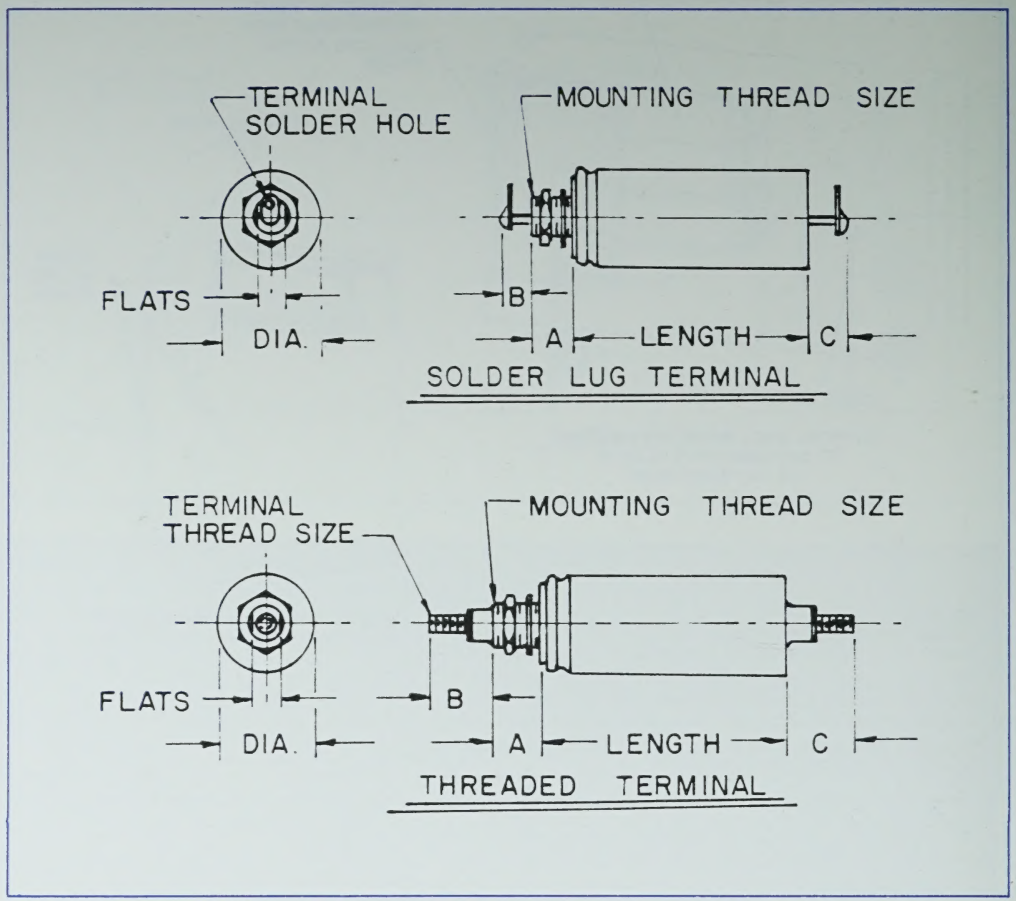
NOTES:
CABINETS CAN BE SUPPLIED WITH THE FILTER ELEMENTS WIRED TO TERMINAL BOARDS FOR EASE OF ON-SITE HOOK-UP.

OPTIONS ALSO INCLUDE CABINETS WITH WELDED CONDUIT HUBS OR NIPPLES FOR PENETRATION INTO SHIELDED OR SECURE AREAS AND TO FACILITATE CONDUIT INSTALLATION.

CONTACT MTK ELECTRONICS INC. FOR ADDITIONAL CABINET STYLES AND FILTER CONFIGURATIONS.

NO. OF FILTER PAIRS	CABINET DIMENSIONS		
	W	H	D
10	25	9	10
25	25	20	10
50	25	20	20
100	25	36	20

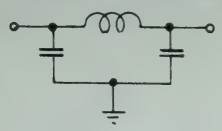
CYLINDRICAL "PI" FILTERS
80 db MIN. @ 0.15 MHz



FEATURES

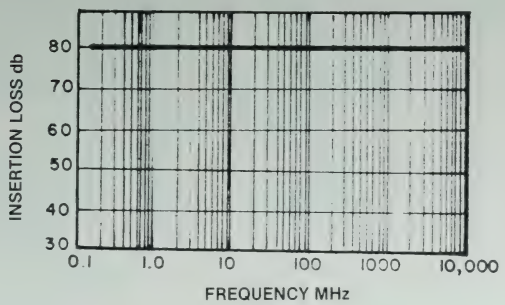
- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Case: Metal, suitably plated to withstand corrosion.

CIRCUIT DIAGRAM



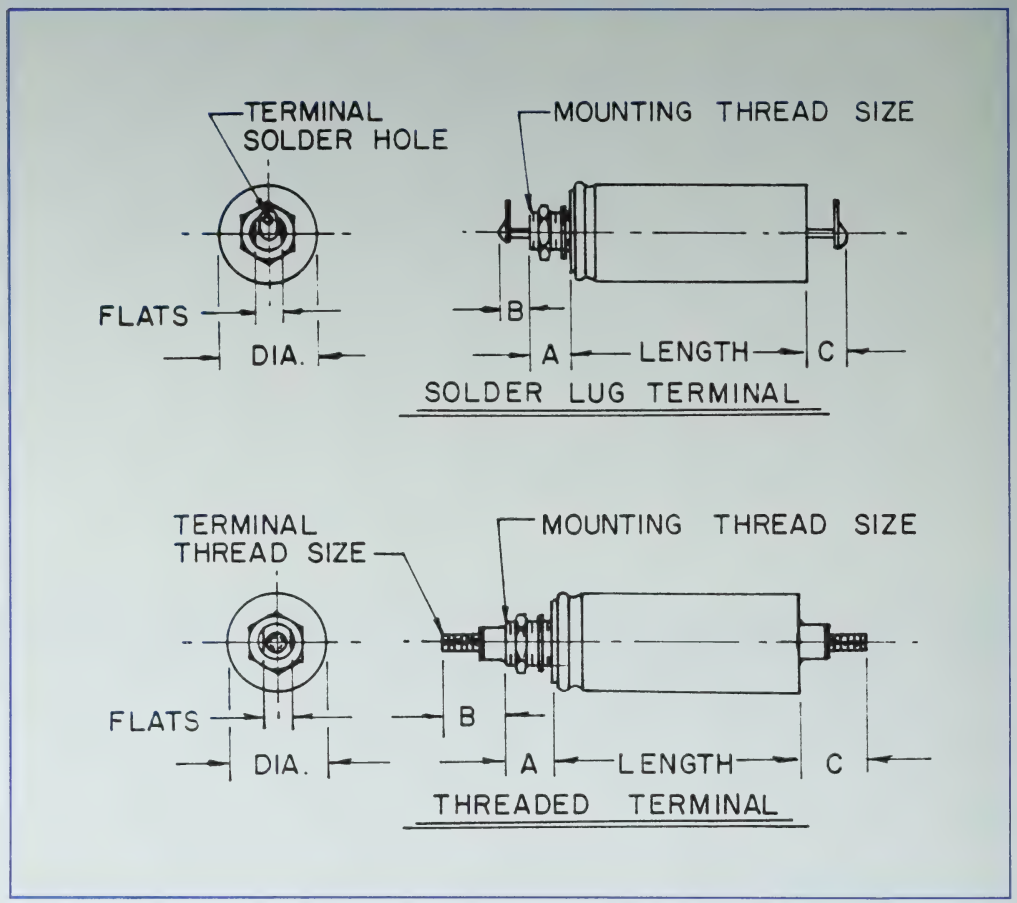
"PI" CIRCUIT

TYPICAL ATTENUATION CHARACTERISTICS



RATING		PART	DIMENSIONS					MOUNTING		TERMINAL
AMPERES	VOLTAGE	NO.	DIA.	LENGTH	A	B	C	THREAD	FLATS	HOLE SIZE / THREAD SIZE
0.5		MTK840	1.00	2.25	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
1		MTK841	1.00	2.50	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
3		MTK842	1.25	4.19	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5	100VDC	MTK843	1.50	3.88	.50	.69	.69	3/4-20	.656	8-32 THD.
10		MTK844	2.25	3.88	.56	.69	.69	1-1/8-18	1.062	8-32 THD.
0.5		MTK847	1.00	3.00	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
1		MTK848	1.13	3.32	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
3	115 VAC	MTK849	1.50	3.75	.50	.69	.69	3/4-20	.656	8-32 THD.
5	0-400Hz	MTK850	1.50	4.38	.50	.69	.69	3/4-20	.656	8-32 THD.
10	400 VDC	MTK851	2.25	5.25	.56	.69	.69	1-1/8-18	1.062	8-32 THD.
0.5		MTK854	1.13	3.56	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
1	250 VAC	MTK855	1.25	4.25	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
3	0-400Hz	MTK856	1.75	4.50	.50	.69	.69	3/4-20	.656	8-32 THD.
5	600 VDC	MTK857	1.75	5.75	.50	.69	.69	3/4-20	.656	8-32 THD.
10		MTK858	2.25	6.50	.56	.69	.69	1-1/8-18	1.062	8-32 THD.

CYLINDRICAL "PI" FILTERS
60 db MIN. @ 0.15 MHz

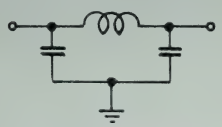


FEATURES

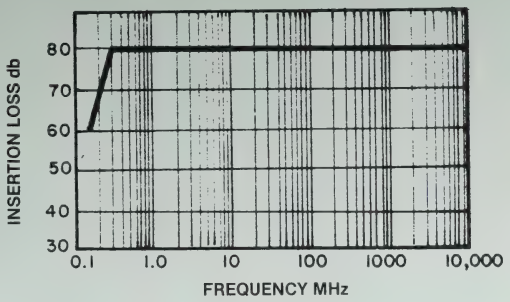
- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Case: Metal, suitably plated to withstand corrosion.

TYPICAL ATTENUATION CHARACTERISTICS

CIRCUIT DIAGRAM

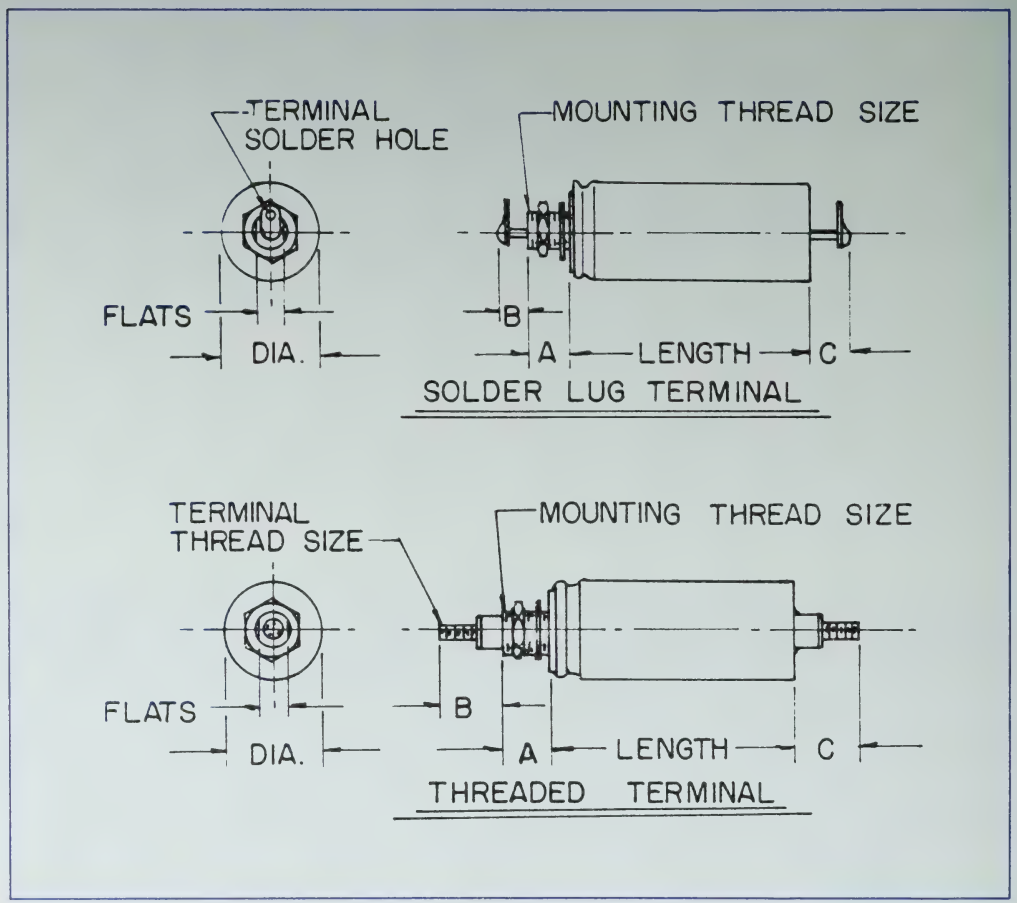


"PI" CIRCUIT



RATING		PART	DIMENSIONS					MOUNTING		TERMINAL
AMPERES	VOLTAGE	NO.	DIA.	LENGTH	A	B	C	THREAD	FLATS	HOLE SIZE / THREAD SIZE
1		MTK821	.75	2.32	.28	.32	.32	5/16-24	.250	.06 x .13 SLOT
3		MTK822	1.13	2.38	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5		MTK823	1.13	2.64	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
10	100VDC	MTK824	1.50	3.50	.50	.69	.69	3/4-20	.656	8-32 THD.
20		MTK825	1.50	3.88	.50	.69	.69	3/4-20	.656	8-32 THD.
30		MTK826	2.25	4.00	.56	.81	.81	1-1/8-18	1.062	10-32 THD.
50		MTK827	2.25	4.50	.56	.88	.88	1-1/8-18	1.062	1/4-20 THD.
1		MTK828	1.00	2.38	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
3		MTK829	1.13	3.00	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5	115 VAC	MTK830	1.25	4.13	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
10	0-400Hz	MTK831	1.50	4.19	.50	.69	.69	3/4-20	.656	8-32 THD.
20	400VDC	MTK832	1.75	5.00	.50	.69	.69	3/4-20	.656	8-32 THD.
30		MTK833	2.25	4.88	.56	.81	.81	1-1/8-18	1.062	10-32 THD.
50		MTK834	2.25	5.75	.56	.88	.88	1-1/8-18	1.062	1/4-20 THD.
1		MTK835	1.00	3.19	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
3	250 VAC	MTK836	1.25	3.75	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5	0-400Hz	MTK837	1.50	4.00	.50	.69	.69	3/4-20	.656	8-32 THD.
10	600 VDC	MTK838	1.50	5.13	.50	.69	.69	3/4-20	.656	8-32 THD.
20		MTK839	2.25	5.00	.56	.69	.69	1-1/8-18	1.062	8-32 THD.

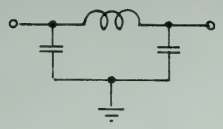
CYLINDRICAL "PI" FILTERS
40 db MIN. @ 0.15 MHz



FEATURES

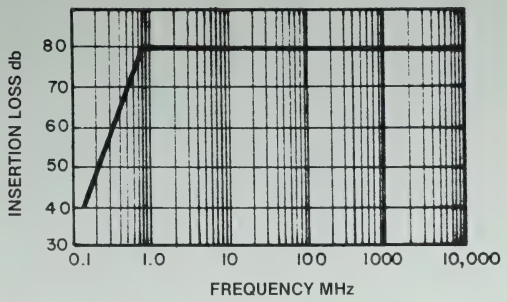
- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Case: Metal, suitably plated to withstand corrosion.

CIRCUIT DIAGRAM



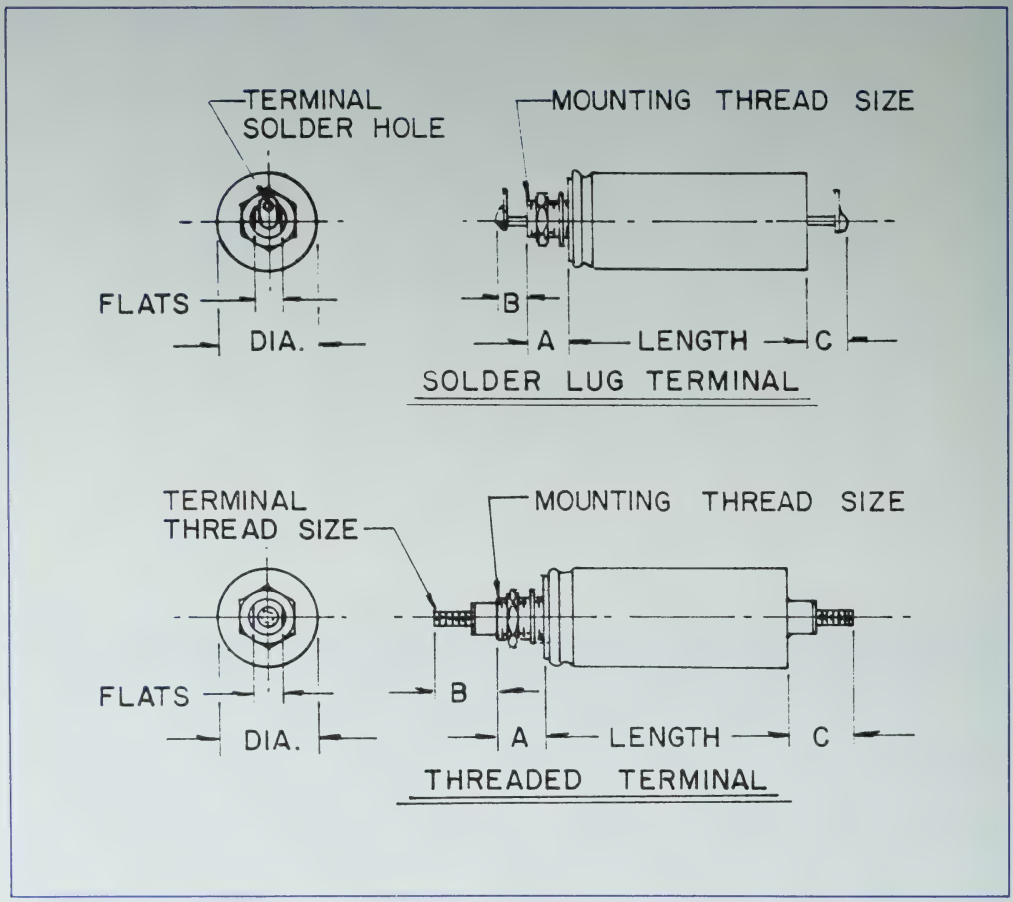
"PI" CIRCUIT

TYPICAL ATTENUATION CHARACTERISTICS



RATING		PART	DIMENSIONS					MOUNTING		TERMINAL
AMPERES	VOLTAGE	NO.	DIA.	LENGTH	A	B	C	THREAD	FLATS	HOLE SIZE/ THREAD SIZE
1		MTK800	.67	1.96	.25	.19	.19	1/4-28	.201	.060 HOLE
3		MTK801	.75	2.38	.28	.32	.32	5/16-24	.250	.06 x .13 SLOT
5		MTK802	1.13	2.25	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
10	100VDC	MTK803	1.25	2.58	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
20		MTK804	1.25	3.25	.50	.69	.69	5/8-24	.530	8-32 THD.
30		MTK805	2.25	4.00	.56	.81	.81	1-1/8-18	1.062	10-32 THD.
50		MTK806	2.25	4.00	.56	.88	.88	1-1/8-18	1.062	1/4-20 THD.
1		MTK807	.67	2.32	.25	.19	.19	1/4-28	.201	.060 HOLE
3		MTK808	1.00	2.56	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5	115 VAC	MTK809	1.13	2.88	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
10	0-400Hz	MTK810	1.25	3.25	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
20	400VDC	MTK811	1.50	3.64	.50	.69	.69	3/4-20	.656	8-32 THD.
30		MTK812	2.25	4.00	.56	.81	.81	1-1/8-18	1.062	10-32 THD.
50		MTK813	2.25	4.00	.56	.88	.88	1-1/8-18	1.062	1/4-20 THD.
1		MTK814	.75	2.88	.28	.32	.32	5/16-24	.250	.06 x .13 SLOT
3		MTK815	1.00	3.19	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
5	250 VAC	MTK816	1.25	3.64	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
10	0-400Hz	MTK817	1.25	4.25	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT
20	600VDC	MTK818	1.50	4.50	.50	.69	.69	3/4-20	.656	8-32 THD.
30		MTK819	2.25	5.00	.56	.81	.81	1-1/8-18	1.062	10-32 THD.
50		MTK820	2.25	5.38	.56	.88	.88	1-1/8-18	1.062	1/4-20 THD.

CYLINDRICAL "L" FILTERS



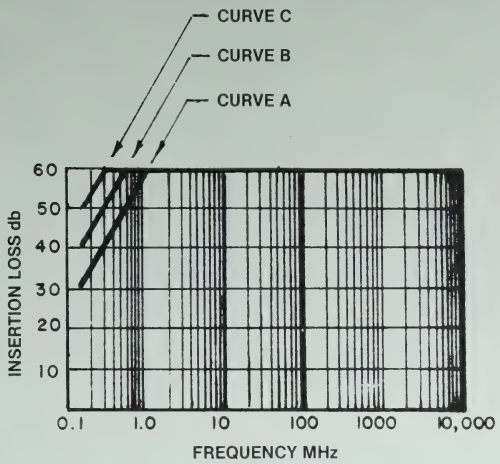
FEATURES

- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Case: Metal, suitably plated to withstand corrosion.

CIRCUIT DIAGRAM

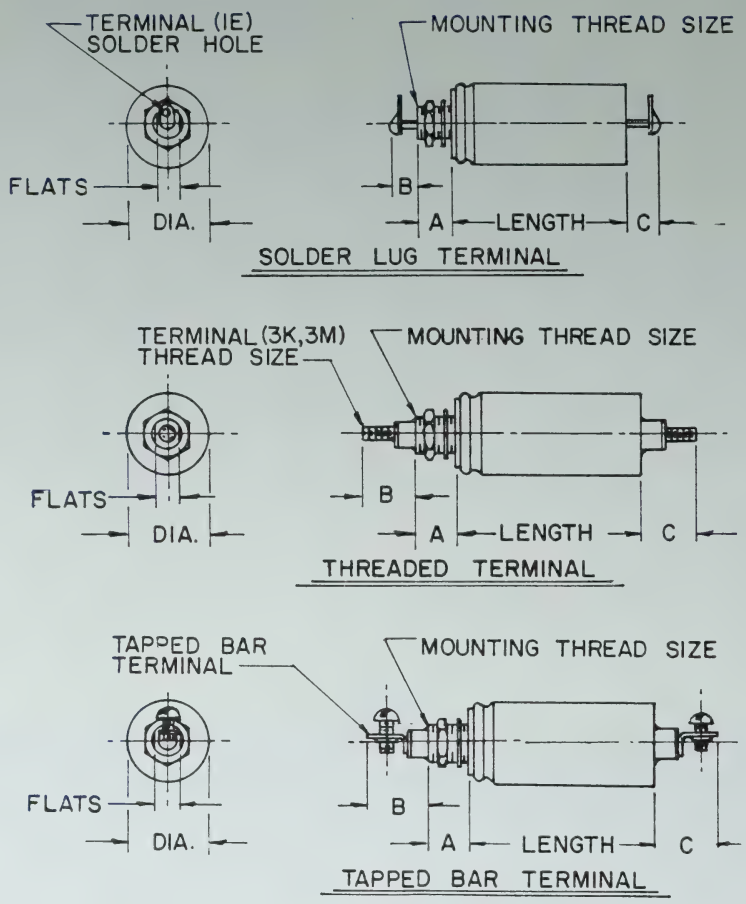
"L" CIRCUIT

TYPICAL ATTENUATION CHARACTERISTICS



RATING AMPERES	RATING VOLTAGE	PART NO.	DIMENSIONS DIA.	LENGTH	A	B	C	MOUNTING THREAD	FLATS	TERMINAL HOLE SIZE / THREAD SIZE	CURVE
1		MTK861	.67	1.63	.25	.19	.19	1/4-28	.201	.060 HOLE	A
1		MTK862	1.00	1.69	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	C
3		MTK863	.75	1.94	.28	.32	.32	5/16-24	.250	.06 x .13 SLOT	A
3	100VDC	MTK864	1.25	2.81	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	B
5		MTK865	1.13	2.06	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	A
5		MTK866	1.50	2.63	.50	.69	.69	3/4-20	.656	8-32 THD.	B
1		MTK868	.67	1.94	.25	.19	.19	1/4-28	.201	.060 HOLE	A
1		MTK869	1.13	2.13	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	C
3	115 VAC	MTK870	1.00	2.19	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	A
3	0-400Hz	MTK871	1.50	2.31	.50	.69	.69	3/4-20	.656	8-32 THD.	B
5	400VDC	MTK872	1.13	2.69	.44	.25	.25	7/16-20	.370	.09 x .19 SLOT	A
5		MTK873	1.50	3.13	.50	.69	.69	3/4-20	.656	8-32 THD.	B
1		MTK874	.75	2.50	.28	.32	.32	5/16-24	.250	.06 x.13 SLOT	A
1	250VAC	MTK875	1.25	2.56	.44	.25	.25	7/16-20	.370	.09 x.19 SLOT	C
3	0-400Hz	MTK876	1.00	2.81	.44	.25	.25	7/16-20	.370	.09 x.19 SLOT	A
3	600VDC	MTK877	1.75	2.62	.50	.69	.69	3/4-20	.656	8-32 THD.	B
5		MTK878	1.25	3.44	.44	.25	.25	7/16-20	.370	.09 x.19 SLOT	A
5		MTK879	1.75	4.06	.50	.69	.69	3/4-20	.656	8-32 THD.	B

CYLINDRICAL "PI" FILTERS MILITARY STYLES

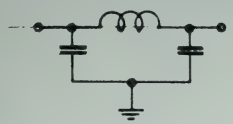


FEATURES

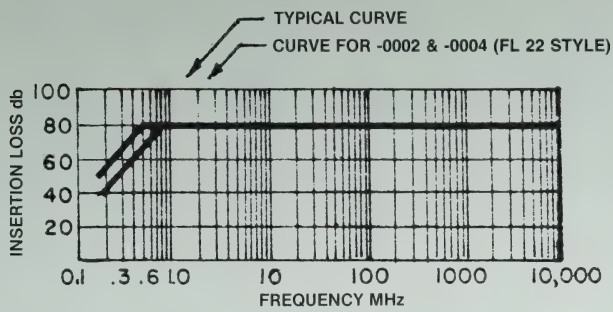
- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Case: Metal, suitably plated to withstand corrosion.

TYPICAL ATTENUATION CHARACTERISTICS FOR FL 22, & FL 24 STYLE

CIRCUIT DIAGRAM



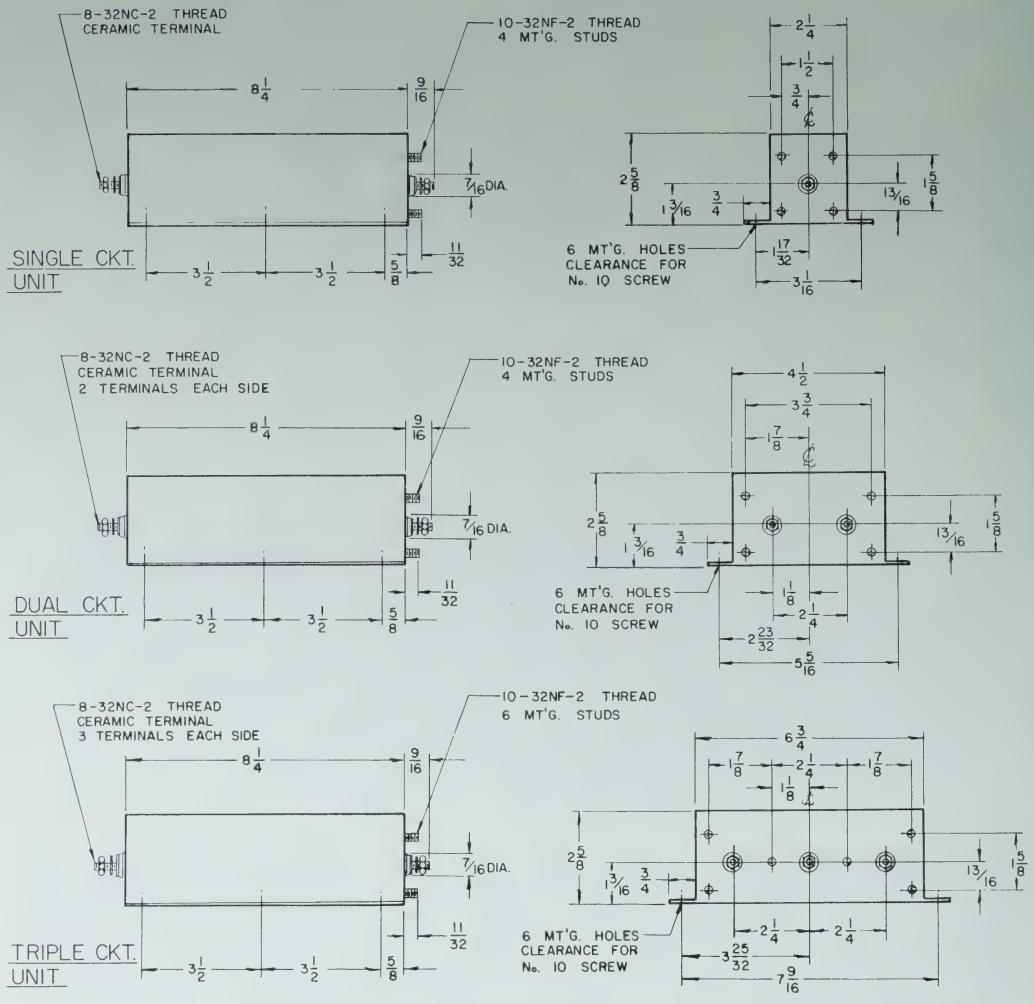
"PI" CIRCUIT



FL 84 STYLE		INSERTION LOSS				
		150 KHz	300 KHz	1 MHz	10 MHz	1 GHz
MI5733/41—0005	MTK 883-5	60	75	80	80	80
MI5733/41—0001	MTK 883-1	25	45	80	80	70
MI5733/41—0006	MTK 883-6	60	—	100	80	—
MI5733/41—0003	MTK 883-3	40	70	80	80	80
MI5733/41—0002	MTK 883-2	55	75	90	90	90
MI5733/41—0004	MTK 883-4	55	—	90	90	—

STYLE	MILITARY EQUIVALENT	PART NO.	RATING AMPERES	RATING VOLTAGE	DIMENSIONS DIA.	LENGTH	A	B	C	MOUNTING THREAD	FLATS	TERMINAL TYPE & SIZE
FL 22	MI5733/1-0001	MTK881-1	1		.75	2.094	.281	.25	.25	5/16-24	.250	IE
	MI5733/1-0002	MTK881-2	5		1.00	2.375	.375	.25	.25	1/2-28	.440	IE
	MI5733/1-0003	MTK881-3	5		1.00	2.750	.375	.25	.25	1/2-28	.440	IE
	MI5733/1-0004	MTK881-4	10	100 VDC	1.125	2.750	.375	.25	.25	7/16-20	.370	IE
	MI5733/1-0005	MTK881-5	10		1.250	2.500	.375	.25	.25	5/8-24	.530	IE
	MI5733/1-0006	MTK881-6	20		1.375	3.000	.375	.62	.62	5/8-24	.530	3K-10-32 THD.
	MI5733/1-0007	MTK881-7	30		1.500	3.250	.375	.62	.62	3/4-20	.655	3K-10-32 THD.
FL 24	MI5733/2-0001	MTK882-1	1		.875	2.562	.375	.25	.25	1/2-28	.440	IE
	MI5733/2-0002	MTK882-2	5		1.125	3.875	.375	.25	.25	5/8-24	.530	IE
	MI5733/2-0003	MTK882-3	10	125 VAC	1.250	3.875	.375	.25	.25	3/4-20	.655	IE
	MI5733/2-0004	MTK882-4	15	0-400Hz	1.375	4.125	.375	.62	.62	3/4-20	.655	3K-10-32 THD.
	MI5733/2-0005	MTK882-5	20	400 VDC	1.500	4.156	.375	.62	.62	3/4-20	.655	3K-10-32 THD.
	MI5733/2-0006	MTK882-6	55		2.250	4.125	.500	.81	.81	1-1/8-18	1.055	3M-1/4-28 THD.
					MAX.	MAX.	MAX.	NOM.	NOM.		NOM.	
FL 84	MI5733/41-0005	MTK 883-5	1		1.032	3.120	.457	.25	.25	7/16-20	.370	IE .09 x.19 SLOT
	MI5733/41-0001	MTK 883-1	10	125 VAC	1.187	2.655	.454	.25	.25	7/16-20	.370	IE .09 x.19 SLOT
	MI5733/41-0006	MTK 883-6	10	0-400Hz	1.312	3.500	.391	.40	.40	5/8-24	.531	IE .09 x.19 SLOT
	MI5733/41-0003	MTK 883-3	15	400 VDC	1.270	3.937	.781	.78	.78	3/4-20	.655	TAPPED BAR
	MI5733/41-0002	MTK 883-2	20		1.395	4.562	.656	.66	.66	3/4-20	.655	TAPPED BAR
	MI5733/41-0004	MTK 883-4	20	125 VDC	1.312	3.031	.391	.40	.40	5/8-24	.531	IE .09 x.19 SLOT

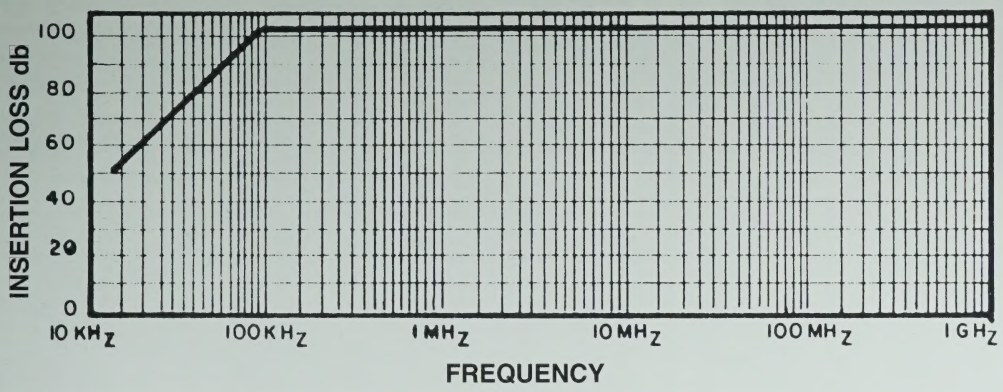
SINGLE, DUAL AND TRIPLE CIRCUIT FILTERS



FEATURES

- Designed, manufactured and tested to the applicable portions of MIL-F-15733.
- Filter hermetically sealed.
- Maximum operating temperature: 85°C
- Overload safety: 140% rated current for 15 minutes.
- Case: Steel suitably plated to withstand corrosion.

TYPICAL ATTENUATION CHARACTERISTICS



PART NO.	CURRENT AMPERES	LINE TO GROUND VOLTAGE AC DC	POWER LINE FREQ.	APPROX. WT. (LBS.)
MTK 1803	5	130/400	0 400Hz	3
MTK 1804	10			3
MTK 1805	15			3
MTK 1806	2 × 5			6
MTK 1807	2 × 10			6
MTK 1808	2 × 15			6
MTK1809	3 × 5			9
MTK 1810	3 × 10			9
MTK 1811	3 × 15			9

RECTANGULAR AND TUBULAR FILTERS

INSERTION LOSS

The two digits next to the basic part number under the column marked db is the insertion loss for that filter at a frequency of 150 kilohertz. The symbol db stands for decibels which is a logorithmic ratio of signal input to signal output when measured in a 50 ohm circuit. The higher the decibel number the greater the interference reducing ability of the filter.

The rectangular filters shown have an effective range of performance from below 150 kilohertz to about 400 megahertz. The tubular filters shown are effective from below 150 kilohertz to 10 gigahertz.

BUILD PART NUMBER AS FOLLOWS

1. Select current and voltage of circuit where the filter will be used.
2. Obtain basic part number from table below based on attenuation requirements.
3. Select mounting style from facing page.
4. Select terminal number from back page.
5. Complete part number this way.

70V2.5C H 2

Basic part number — Mounting style — Terminal No.

RECTANGULAR TYPES

EFFECTIVE TO 400 MEGAHERTZ

Amperes	Case Size A	Case Size B	Case Size C	0-70 VDC Series Basic Part No.	0-70 VDC Series db	400VDC/150VAC 0-70 Series Basic Part No.	400VDC/150VAC 0-70 Series db	150 VAC 50-1000 Hertz Series Basic Part No.	150 VAC 50-1000 Hertz Series db	600 VDC/250 VAC 0-70 Hertz Series Basic Part No.	600 VDC/250 VAC 0-70 Hertz Series db	250 VAC 50-1000 Hertz Series Basic Part No.	250 VAC 50-1000 Hertz Series db
0.4	1 1/8	1	11/16	70V0.4A	48	400V0.4A	24	150V0.4A	24	•	•	•	•
	1 3/4	1 1/4	7/8	70V0.4B	60	400V0.4B	47	150V0.4B	47	600V0.4B	42	250V0.4B	42
	2	1 3/4	1 1/8	70V0.4C	90	400V0.4C	90	150V0.4C	90	600V0.4C	90	250V0.4C	90
0.63	1 1/8	1	11/16	70V0.6A	48	•	•	•	•	•	•	•	•
	1 3/4	1 1/4	7/8	70V0.6B	56	400V0.6B	40	150V0.6B	40	600V0.6B	35	250V0.6B	35
	2	1 3/4	1 1/8	70V0.6C	90	400V0.6C	85	150V0.6C	92	600V0.6C	83	250V0.6C	87
1.0	1 1/8	1	11/16	70V1.0A	47	•	•	•	•	•	•	•	•
	1 3/4	1 1/4	7/8	70V1.0B	53	400V1.0B	30	150V1.0B	30	600V1.0B	30	250V1.0B	30
	2	1 3/4	1 1/8	70V1.0C	87	400V1.0C	74	150V1.0C	87	600V1.0C	75	250V1.0C	80
2.5	2	1 3/4	1 1/8	70V2.5C	75	400V2.5C	57	150V2.5C	60	600V2.5C	59	250V2.5C	64
	2	2	1 1/4	70V2.5D	80	400V2.5D	63	150V2.5D	67	600V2.5D	69	250V2.5D	70
4.0	2	1 3/4	1 1/8	70V4.0C	72	400V4.0C	48	150V4.0C	52	600V4.0C	50	250V4.0C	52
	2	2	1 1/4	70V4.0D	82	400V4.0D	68	150V4.0D	68	600V4.0D	62	250V4.0D	62
6.3	2	1 3/4	1 1/8	70V6.3C	72	400V6.3C	43	150V6.3C	45	600V6.3C	44	250V6.3C	47
	2	2	1 1/4	70V6.3D	80	400V6.3D	60	150V6.3D	60	600V6.3D	55	250V6.3D	55
	3 1/16	2 7/8	1 5/8	•	•	400V6.3E	88	150V6.3E	90	600V6.3E	75	250V6.3E	75
10	2	1 3/4	1 1/8	70V10C	60	400V10C	40	150V10C	43	600V10C	27	250V10C	30
	2	2	1 1/4	70V10D	72	400V10D	50	150V10D	54	600V10D	35	250V10D	35
	3 1/16	2 7/8	1 5/8	70V10E	90	400V10E	72	150V10E	75	600V10E	63	250V10E	66
16	3 1/16	2 7/8	1 5/8	70V16E	77	400V16E	65	150V16E	65	600V16E	49	250V16E	55
25	3 1/16	2 7/8	1 5/8	70V25E	70	400V25E	55	150V25E	55	600V25E	44	250V25E	48
	3 1/16	2 7/8	2 1/8	70V25F	84	400V25F	60	150V25F	65	600V25F	55	250V25F	60
40	3 1/16	2 7/8	1 5/8	70V40E	50	400V40E	20	150V40E	23	600V40E	35	250V40E	35
	3 1/16	2 7/8	2 1/8	70V40F	75	400V40F	50	150V40F	50	600V40F	45	250V40F	45
63	3 1/16	2 7/8	1 5/8	70V63E	50	400V63E	19	150V63E	22	600V63E	35	250V63E	35
	3 1/16	2 7/8	2 1/8	70V63F	55	400V63F	50	150V63F	50	600V63F	40	250V63F	45
	3 1/2	3 1/2	2 1/2	70V63G	80	400V63G	60	150V63G	60	600V63G	45	250V63G	54
100	3 1/16	2 7/8	2 1/8	70V100F	55	400V100F	50	150V100F	50	600V100F	40	250V100F	45
	3 1/2	3 1/2	2 1/2	70V100G	60	400V100G	55	150V100G	55	600V100G	45	250V100G	50

TUBULAR TYPES

EFFECTIVE TO 10 GIGAHERTZ

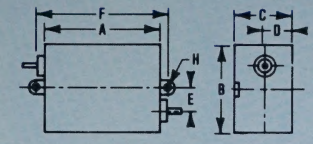
Amperes	Case Size Dia	Case Size Length	0-70 VDC Series Basic Part No.	0-70 VDC Series db	400VDC/150VAC 0-500 Hertz Series Basic Part No.	400VDC/150VAC 0-500 Hertz Series db	600 VDC/250 VAC 0-500 Hertz Series Basic Part No.	600 VDC/250 VAC 0-500 Hertz Series db
1.0	1	2 1/2	70T1.0W	75	400T1.0W	70	600T1.0W	55
	1	4	70T1.0X	90	400T1.0X	85	600T1.0X	70
2.5	1	2 1/2	70T2.5W	75	400T2.5W	60	•	•
	1	4	70T2.5X	88	400T2.5X	70	600T2.5X	55
	1 3/8	4 1/8	•	•	400T2.5Y	90	600T2.5Y	75
4.0	1	4	70T4.0X	75	400T4.0X	65	600T4.0X	45
	1 3/8	4 1/8	70T4.0Y	90	400T4.0Y	85	600T4.0Y	70
6.3	1	4	70T6.3X	70	•	•	•	•
	1 3/8	4 1/8	70T6.3Y	85	400T6.3Y	65	600T6.3Y	45
	1 1/2	4 3/8	•	•	400T6.3Z	90	600T6.3Z	75
10	1	4	70T10X	60	•	•	•	•
	1 3/8	4 1/8	70T10Y	80	400T10Y	65	600T10Y	45
	1 1/2	4 3/8	•	•	400T10Z	80	600T10Z	60
16	1 3/8	4 1/8	70T16Y	70	400T16Y	55	600T16Y	35
	1 1/2	4 3/8	70T16Z	85	400T16Z	70	600T16Z	50
20	1 1/2	4 3/8	70T20Z	70	400T20Z	60	600T20Z	40

VOLTAGE & CURRENT RATINGS

These filters are rated for continuous operation at a maximum ambient temperature of 85° C (185° F). Any filter may be used at a lower temperature and current than its rating.
These filters have a low voltage drop so they will not interfere with the operation of the equipment they are installed into.
The 70 volt series has a maximum drop of 0.3 volts at full rated current. The 150 volt and 250 volt AC series have a maximum drop of 1% of the AC rating at full rated current.

RECTANGULAR TYPES

STYLE H

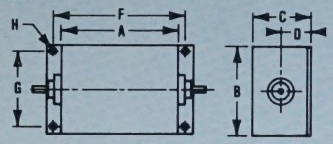


IF BASIC PART NUMBER CONTAINS ONE OF THESE LETTERS

STYLE H DIMENSIONS ARE

	A	B	C	D	E	F	H
A	1 1/8	1	11/16	11/32	1/4	1 7/16	5/32
B	1 3/4	1 1/4	7/8	7/16	1/4	2 1/8	3/16
C	2	1 3/4	1 1/8	9/16	1/2	2 3/8	3/16
D	2	2	1 1/4	5/8	5/8	2 3/8	3/16

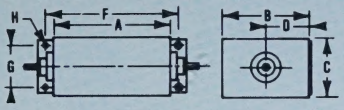
STYLE H



STYLE H DIMENSIONS ARE

	A	B	C	D	F	G	H
E	3 1/16	2 7/8	1 5/8	13/16	3 5/8	2 1/8	0.195
F	3 1/16	2 7/8	2 1/8	1 1/16	3 5/8	2 1/8	0.195
G	3 1/2	3 1/2	2 1/2	1 1/4	4 1/2	2	0.195

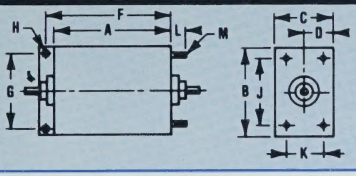
STYLE J



STYLE J DIMENSIONS ARE

	A	B	C	D	F	G	H
E	3 1/16	2 7/8	1 5/8	1 7/16	3 5/8	7/8	0.195
F	3 1/16	2 7/8	2 1/8	1 7/16	3 5/8	1 3/8	0.195
G	3 1/2	3 1/2	2 1/2	1 3/4	4 1/2	1 3/4	0.195

STYLE K

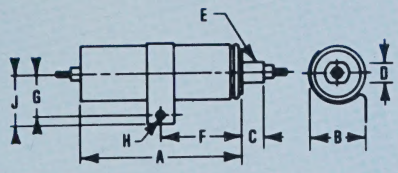


STYLE K DIMENSIONS ARE

	A	B	C	D	F	G	H	J	K	L	M
E	3 1/16	2 7/8	1 5/8	13/16	3 3/8	2 1/8	0.195	2	7/8	15/32	10-32
F	3 1/16	2 7/8	2 1/8	1 1/16	3 3/8	2 1/8	0.195	2	1 3/8	15/32	10-32
G	3 1/2	3 1/2	2 1/2	1 1/4	4	2	0.195	2 1/4	1 3/4	15/32	10-32

TUBULAR TYPES

STYLE N

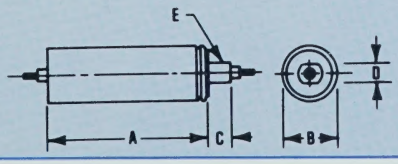


IF BASIC PART NUMBER CONTAIN ONE OF THESE LETTERS

STYLE N DIMENSIONS ARE

	A	B	C	D	E	F	G	H	J
W	2 1/2	1	7/16	3/8	7/16-20NF	1 1/4	3/4	0.156	15/16
X	4	1	7/16	3/8	7/16-20NF	2	3/4	0.156	15/16
Y	4 1/8	1 3/8	5/8	17/32	5/8-24NF	2 1/16	1	0.195	1 1/4
Z	4 3/8	1 1/2	5/8	17/32	5/8-24NF	2 3/16	1 1/8	0.195	1 3/8

STYLE P



STYLE P DIMENSIONS ARE

	A	B	C	D	E
W	2 1/2	1	7/16	3/8	7/16-20NF
X	4	1	7/16	3/8	7/16-20NF
Y	4 1/8	1 3/8	5/8	17/32	5/8-24NF
Z	4 3/8	1 1/2	5/8	17/32	5/8-24NF

ELECTRONICS, INC.
516-567-4666

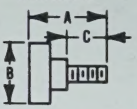
TERMINALS

IF BASIC PART NUMBER CONTAINS ONE OF THESE LETTERS

USE TERMINAL TYPE

FOR THIS CURRENT RANGE

THREADED TERMINAL



Supplied with Nut and Lockwasher.

		AMP.	THREAD SIZE	A	B	C
ABCDWX	1	0-2.5	4-40	1/2	5/16	3/16
BCDYZ	2	0-10	6-32	5/8	7/16	9/32
BCDEYZ	3	0-16	8-32	5/8	7/16	5/16
EFG	4	4-25	10-32	13/16	1	5/16
EFG	5	10-63	1/4-20	1	1	3/8
EFG	6	25-100	3/8-16	1 1/4	1 1/2	5/16

SOLDER TERMINAL (45°)

ABCDE	7	0-16	—	13/32	5/16	—

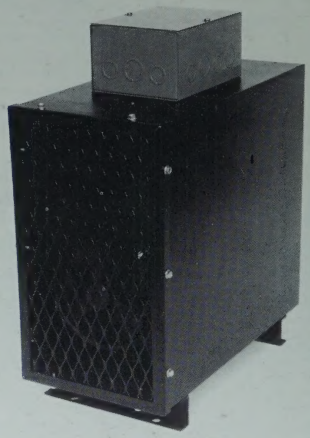
SOLDER TERMINAL (90°)

ABCDEWX	8	0-16	—	1/2	5/16	—
YZ	9	0-20	—	1/2	15/32	—

TERMINAL STYLES TO BE USED WITH FILTERS DESCRIBED ON PAGES 20 & 21.

OTHER PRODUCTS AVAILABLE FROM MTK ELECTRONICS, INC. INCLUDE:

- CUSTOM CAPACITORS
- CHOKES
- ENCAPSULATED INDUCTORS
- RF CABINETS & ENCLOSURES



POWER FACTOR CORRECTION INDUCTOR ASSEMBLIES

THE CAPACITOR ELEMENTS OF BROADBAND FILTERS CAN APPLY A REACTIVE CURRENT TO A GENERATOR. WITH A 400Hz POWER SOURCE, THE FILTER REACTIVE CURRENT CAN PRESENT DIFFICULTY TO A GENERATOR WITH MARGINAL RESERVE CAPABILITY.

THE POWER FACTOR CORRECTION INDUCTOR ASSEMBLY PICTURED ABOVE IS DESIGNED TO MINIMIZE THE EFFECT OF FILTER REACTIVE LOADING BY PROVIDING AN INDUCTIVE LOAD TO THE GENERATOR OF EQUAL MAGNITUDE AS THE CAPACITIVE LOAD WHICH EFFECTIVELY CANCELS THE CAPACITIVE LOAD CURRENT.

POWER FACTOR INDUCTOR ASSEMBLIES CAN BE CUSTOM DESIGNED FOR ANY APPLICATION WHERE THE CAPACITIVE LOADING VALUE IS KNOWN.